ISSTS Courses (ALMC-IW) are more programming-oriented than their "sister" STS offerings. They include <u>VB6</u> ("Intro to MS Visual Basic 6"), <u>VBAMDLA</u> ("MS Visual Basic for Modeling Analysts"), and <u>SQL</u> ("Intro to MS Access SQL Use"). *The first of these is described below:*

<u>1. VB6</u> ("Intro to MS Visual Basic 6")

VB6 (MicroSoft Visual Basic, version 6) is perhaps the most widely used computer language for application development. It utilizes both structured and OOP (object-oriented programming) aspects to offer a vast number of internal capabilities. It also can use the data and capabilities of other MS Windows programs, and greatly supports the RAD (rapid application development) software cycle. The "cutting edge" OR (Operations Research) applications are increasingly designed by using many of VB's capabilities. OR analysts can thus profit greatly from learning to use VB for creating their own stand-alone programs.

In this hands-on introductory course, participants learn to use key parts of VB6's vast IDE (integrated development environment) in order to develop, test, and improve VB programs. Two course highlights include an individual student exercise on developing a simple new VB application, and an overview of the similar--but more limited--VBA (Visual Basic for Applications) language that is intrinsic to all of MicroSoft's major Windows programs. In particular, this latter introduction makes the Introductory VB course a solid lead-in to ISSTS-VBAMDA, and also to Anton Rowe's "VBA in (Excel) OR" course, which is offered as part of ALMC's CEP (Continuing Education Program).

Topic Outline:
  <u>Day One: Overview and First Topics</u>
  • **Introduction to OOP, RAD and VB**
  • **Using VB's IDE to Create, Run and Save Programs**
• **Setting Properties, Writing Code, Building Executables with OLE and ActiveX Controls**
  <u>Day Two: Intermediate Topics (Part One)</u>
  • **Menus, Variables and Data Types**
  • **Event-Driven Programming, Conditional Statements and If...Then Statements**
  <u>Day Three: Intermediate Topics (Part Two)</u>
  • **Loops and Arrays**
  • **Individual Student Exercise in Developing a Simple VB Application**
  <u>Day 4: Some Advanced Topics and Overall Review</u>
  • **Demo/Discussion of Individual Exercises**
  • **Standard Modules, Public Variables, and Working with Databases**
• **Overview of VBA, Review and Related Resources, Course Evaluation and Graduation**

<u>TEXTS</u>: Participants must PURCHASE the VB6 text at the ALMC Bookstore after arriving at ALMC (Fort Lee, VA). They should thus ensure that either their travel orders OR their Training Form (DD 1556) has a statement about authorizing individual reimbursal for approximately $50.00 of text materials. The course text includes the limited Learning Edition of MS Visual Basic 6. Students also receive a binder with all classroom slides and exercises.

ISSTS Prerequisites *include those for the STS courses; that is, familiarity with the MS Windows (95 or above) environment. The ISSTS prerequisites also include a job requirement for learning to use that particular offering's programming technique. Currently, the* **VBA-MDLA course also includes a prerequisite of completing SED's intensive VB6 course** *or its equivalent.*

  Other special topics seminars may be individually negotiated with the Course Director, Dr. George Huntley (804-765-4265, DSN 539-, FAX -4648, email HUNTLEYG@LEE.ARMY.MIL).